

1. A genetic sequence for an isolated subunit for a DNA polymerase III gene selected from the subunit group consisting of δ , δ' , χ , θ , and ψ genes.
2. An isolated and purified enzyme showing the activity of the 5 10 subunit DNA polymerase III holoenzyme which contains only the polymerase peptide subunits for α , ϵ , β , δ , and γ subunits of the naturally occurring holoenzyme.
3. The enzyme according to Claim 2 which further contains the polymerase peptide subunit δ' of the naturally occurring holoenzyme.
- 10 4. An isolated and purified peptide selected from the group of the δ , δ' , χ , θ , and ψ DNA polymerase III holoenzyme peptides.

add
C2